

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virgnia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------|----------------------|------------------------|-------------------------|--|
| 09/665,617 | 09/19/2000 | Kuniki Kino | 506.39084X00 | 5296 | |
| 20457 7 | 7590 11/03/2003 | | EXAM | INER | |
| ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889 | | | MARX, IRENE | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 1651 | | |
| | | | DATE MAILED: 11/03/200 | DATE MAILED: 11/03/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|---|--|--|--|--|
| | 09/665,617 | KINO ET AL. | | | | |
| Office Action Summary | Examin r | Art Unit | | | | |
| | Irene Marx | 1651 | | | | |
| The MAILING DATE of this communication app ars on the cover sheet with the correspondence address | | | | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM | | | | | | |
| THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period varieties are reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 36(a). In no event, however, may y within the statutory minimum of the will apply and will expire SIX (6) Mode, cause the application to become | a reply be timely filed nirty (30) days will be considered timely. DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on 11.5 | September 2003 . | | | | | |
| 2a)⊠ This action is FINAL . 2b)□ Th | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disp sition of Claims A) \(\sum_{\text{claims}} \) A and 5 40 in large paneling in the application | | | | | | |
| 4) Claim(s) 1 and 5-12 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>6-10</u> is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1,5,11 and 12</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or Application Papers | r election requirement. | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents | s have been received. | | | | | |
| 2. Certified copies of the priority documents | s have been received in | Application No | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) ☐ Acknowledgment is made of a claim for domestic | · | | | | | |
| a) The translation of the foreign language pro | visional application has | been received. | | | | |
| Attachment(s) | o priority under 35 0.3.0 | 7. 33 120 and/01 121. | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice o | v Summary (PTO-413) Paper No(s) f Informal Patent Application (PTO-152) | | | | |

Application/Control Number: 09/665,617

Art Unit: 1651

The amendment filed 9/11/03 is acknowledged. Claims 1, 5 and 11-12 are being considered on the merits.

Claims 6-10 are withdrawn from consideration as directed to a non-elected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 5 and 11-12 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the production of histidine with strains of a specific strain of *Escherichia coli*, i.e., strain H-9341, does not reasonably provide enablement for the production of this amino acid with any *Escherichia* resistant to 150 mg/l of any aminoquinoline or even a strain of *Escherichia* resistant to this amount of primaquine. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

The rejection is stated in the last Office action.

Response to Arguments

Applicant's arguments and the Abe declaration have been fully considered but they are not deemed to be persuasive.

The Abe declaration refers to Example 1 of the specification, wherein strain H-9340 resistant to 1,2,4, triazole alanine is obtained from strain ATCC 21318. This strain is further mutagenized and selected to obtain strains according to the claimed invention. While the strain appears to have been deposited as FERM BP-6673, there is no clear indication on the record that all restrictions on the availability to the public of the material so deposited will be irrevocably removed upon the granting of a patent. MPEP 2403. Strain H-9340 is clearly required as indicated in the example 1 of the specification, to obtain the further strains touted in the declaration. The deposit declaration for strain H9341, FERM BP-6674, is of record.

In addition, the selection process is exclusively carried out with 150 mg/l primaquine. From the data presented it cannot be readily ascertained that a selection with any other

Application/Control Number: 09/665,617 Page 3

Art Unit: 1651

aminoquinoline would affect histidine production, since no clear correlation has been provided. As previously indicated by Applicants, "there are complicated regulation system in the biosynthesis pathway for amino acids" (previous response, page 6 and references cited therein).

Thus, the scope of the claims is not commensurate with the teachings of enablement of the specification.

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is 703-308-2922. The examiner can normally be reached on M-F (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 703-308-4743. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0926.

Frimary Evaminer

Primary Examiner

Art Unit 1651